

## CLAIMS

- Subs a1*
1. A method for generating data for a data network with a telecommunications switch, the method comprising the steps of:  
A) receiving a telephone call;  
B) determining whether the telephone call includes a first data transmission conforming to a predetermined data protocol, the first data transmission including a first digital information signal;  
if the telephone call includes the first data transmission conforming to the predetermined data protocol, then:  
C) terminating the predetermined data protocol; and  
D) demodulating the first digital information signal from the first data transmission.
- 10 2. The method of claim 1 further comprising the step of:  
E) generating a transmit packet that includes the first digital information signal.
3. The method of claim 3 further comprising the step of:  
F) transmitting the transmit packet into the data network.
4. The method of claim 2 wherein the telecommunications switch only generates the transmit packet when the first data transmission includes the first digital information signal.
5. The method of claim 1 further comprising the steps of:  
E) receiving a receive packet from a data network, the receive packet including a second digital information signal;  
F) modulating the second digital information signal into a second data transmission conforming to the predetermined data protocol; and  
G) transmitting the second data transmission in the telephone call.

6. The method of claim 1 wherein, if the telephone call does not include the first data transmission conforming to the predetermined data protocol, then the telecommunications switch transferring the telephone call to a telephone network.
7. The method of claim 1 wherein a digital signal processor analyzes the telephone call to determine whether the first data transmission conforms to the predetermined data protocol.
8. The method of claim 1 wherein the predetermined data protocol is one of a modem and a facsimile protocol.
9. The method of claim 1 wherein the step of determining whether the telephone call is the first data transmission comprises determining whether one of a called number and calling number for the telephone call is a predetermined number indicating a data call.
10. The method of claim 1 further comprising the steps of:
  - if the telephone call includes the first data transmission conforming to the predetermined data protocol, then:
    - E) translating a called number for the telephone call into a data network indicator; and
    - F) establishing a first data connection to a data network based on the data network indicator.
11. The method of claim 10 further comprising the step of:
  - G) generating a transmit packet that includes the first digital information signal.
12. The method of claim 11 further comprising the step of:
  - H) transmitting the transmit packet into the data network.

13. The method of claim 10 further comprising the steps of:

G) receiving a receive packet from the data network, the receive packet including a second digital information signal;

5 H) modulating the second digital information signal into a second data transmission conforming to the predetermined data protocol;

I) transmitting the second data transmission in the telephone call.

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14. A telecommunications switching system comprising:  
an access circuit that receives telephone calls;  
a data protocol analyzer coupled to the access circuit to determine  
whether telephone calls received from the access circuit include a first data  
5 transmission conforming to a predetermined data protocol, the first data  
transmission including a first digital information signal;  
a data protocol terminator coupled to the access circuit to terminate the  
predetermined data protocol; and  
a demodulator coupled to the access circuit to demodulate the first  
10 digital information signal from the first data transmission.

15. The system of claim 14 further comprising a data network interface  
coupled to the demodulator that generates a transmit packet that includes the  
first digital information signal.

16. The system of claim 15 wherein the data network interface receives a  
receive packet from a data network coupled to the data network interface, the  
receive packet including a second digital information signal.

17. The system of claim 16 further comprising:

a modulator coupled to the data network interface that generates a  
second data transmission conforming to the predetermined data protocol, the  
second data transmission including the second digital information signal.